is roughly the same as the chance of being killed on a coast-to-coast plane ride on a regularly scheduled airline.

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Asymmetrical Hearing Loss

IT IS BELIEVED that between 5 and 6 million industrial workers in the United States have suffered serious loss of hearing from exposure to noise in the workplace. A hearing defect is usually defined as an average hearing loss of greater than 25 dB at frequencies of between 500 and 2,000 Hz. Some 10 percent of industrial workers in this country meet this criterion. The number would be increased to 50 percent if the definition included hearing losses at frequencies above 2,000 Hz. Among patients referred for assessment of compensation for presumed industrially-induced hearing losses, 15 percent have been found to suffer from unilateral or asymmetrical sensorineural hearing loss, with an average difference in hearing threshold between the two ears of 15 dB at frequencies of 500, 1,000 and 4,000 Hz. This condition should be investigated because it may be the first symptom of a variety of cochlear disorders or, more seriously, of retrocochlear disorders such as acoustic neuroma or a posterior fossa tumor.

In assessing the cause of asymmetrical hearing loss, several audiologic and otologic tests are done, including such conventional tests as air and bone conduction audiometry, stapedius reflex threshold estimation, reflex decay, speech reception threshold and speech discrimination and, in some cases, evoked response audiometry. Temporal bone tomograms are conducted to show the internal auditory meatus. Vestibular tests are often carried out as well. Any significant or unexplained abnormality is evaluated further by neurological examination, computerized axial tomographic (CAT) scanning or myelogram, or with repeated vestibular and hearing tests.

One major study of asymmetrical hearing loss attributed the cause to noise exposure in 34.5 percent of the cases reviewed. Three sources of asymmetrical loss of hearing in the workplace were proposed: (1) a sudden loud noise such as an explosion, which produced a massive loss of hearing in both ears, one of which recovered while the other did not; (2) a well-documented history of greater exposure to noise by one ear than the other, as, for example, the employee driving a tractor with one ear turned toward the exhaust, and (3) different sensitivity of the ears to the same sound, producing similar audiometric patterns but at different levels.

Even after considerable investigation, the yield of useful information on this condition is low. In a recent study, 108 patients were evaluated extensively for hearing loss: 87 underwent vestibular tests, 85 had internal canal tomograms done, 12 had myelograms done and 16 had brain scans. No treatable disorders were discovered. Thus, the cause appears to be noise exposure.

In view of the large number of potential cases of asymmetrical hearing loss and the apparent rarity of acoustic neuroma or angle tumor, the high cost of finding a single tumor may be prohibitive. On the basis of recent experience, a reasonable recommendation may be that in unexplained asymmetrical hearing thresholds, otologic and audiologic consultations should be obtained, as well as vestibular tests, x-ray studies of the temporal bone and advanced hearing tests as indicated. If the results of these tests offer no indication of a central pathological condition then neither CAT scans nor myelograms are recommended on a routine basis.

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Occupational Histories in Medical Care

IN THE 1700's Bernardino Ramazzini told us as physicians to ask one more question: "What is your work?" Today, this question is no longer adequate. From many points of view, a much more complete occupational history is recommended—for the protection of workers, management and physicians alike.

The relation of present findings to past occupations may be crucial. An expanding knowledge of occupationally related carcinogenesis rests on sound data regarding work exposures. Smoking patterns and avocations should also be included.

Various occupational risks affecting male and